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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/520,463

10/07/2005

Agostino Di Trapani

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SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

FONSECA, JESSIE T

ART UNIT

PAPER NUMBER

3633

MAIL DATE

DELIVERY MODE

01/28/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/520,463	Applicant(s) DI TRAPANI, AGOSTINO	
	Examiner JESSIE FONSECA	Art Unit 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-55 is/are pending in the application.
- 4a) Of the above claim(s) 46 and 48-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38-45, 47 and 53-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 May 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
The specification to which the oath or declaration is directed has not been adequately identified. See MPEP § 602.

Further, Applicant has not given a post office address anywhere in the application papers as required by 37 CFR 1.33(a), which was in effect at the time of filing of the oath or declaration. A statement over applicant's signature providing a complete post office address is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 41-45, 47, and 53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The scope of claims 41-43 are unclear. A construction element as a component of the wall is claimed, which can refer to any of the components of the wall and does not necessarily signify the construction element in claims 41-43 refer to the construction element having a protuberance and groove. The construction element of claims 41-43

could equally refer to the binder or the combination of the binder and construction element having a protuberance and groove. Further, claims 41-43 further fail to limit the subject matter of the previous claim, which is improper.

Examiner suggests claiming the construction element in an independent claim, wherein the wall may be subsequently claimed comprising the construction element.

Claims 41-45, 47, and 53 are examined as best understood.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 38, 41, 44, 47, and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Vigouroux (FR 1,271,506).

With regards to claims 38 and 41: Vigouroux discloses wall (fig. 1) constructed from a plurality of construction elements (BB) made of concrete like material (clay), the material of each construction element (BB) comprising an upper face, a lower face, and lateral faces, the construction element (BB) comprising at least one groove (AA) extending over the upper face thereof, the groove (AA) being associated with a load-bearing wall or partition (CC, DD) of the construction element and arranged at a distance from an outer lateral edge of the construction element, the construction element further comprising at least one protuberance (P), which extends over the lower

Art Unit: 3633

face thereof, the protuberance (P) being arranged in such a way that when a first construction element of the plurality is superimposed on a second construction element of the plurality within the wall (fig. 1), the protuberance (P) of the first construction element penetrates partially into the groove of the second construction element (lowermost construction element), the construction elements being assembled to one another within the wall by means of a binder (XX), the groove (AA) having a volume determining an amount binder to be applied therein, the binder being applied in the groove in such a way that a strip of the binder is formed between the upper face and the lower face of the construction elements, when the first construction element is superimposed on the second construction element, the strip forming the sole contact between the two superimposed elements.

The strip of Vigouroux is capable of enabling an adjustment of height alignment, height, and plumb of each of the plurality of construction elements.

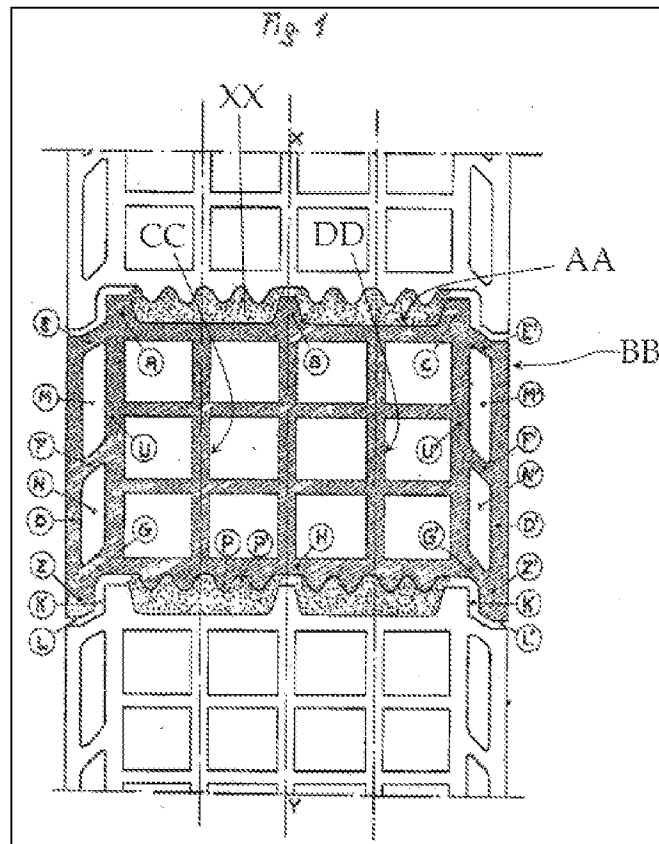


Fig. 1: Vigouroux (FR 1,271,506)

With regards to claim 44: The depth of the groove and a height of the protuberance of Vigouroux would inherently be approximately equal and proportional to a tolerance which is to be accommodated with each construction element, as each construction element would support the placement of a construction element.

With regards to claim 47: Vigouroux further discloses construction element has a plurality of load-bearing walls or partitions (CC, DD), and wherein the groove (AA) is arranged above each of the load-bearing walls or partitions of the plurality (fig. 1).

With regards to claim 55: Vigouroux further discloses that between the first and second construction elements extends a thin joint (fig. 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vigouroux (FR 1,271,506) in view of Hanner (US 2,821,426).

With regards to claim 53: Vigouroux discloses everything previously mentioned, but fails to disclose in combination, a tool intended for lifting the construction element, wherein the tool is dimensioned so as to allow for the lifting, handling, laying and adjusting the alignment, height, and plumb alignment of the construction element.

However, Hanner discloses a tool (18) for the carrying of blocks for ease of handling (figs. 1-5).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Vigouroux to include a tool as taught by Hanner in order to provide means of carrying blocks for ease of handling and transport.

Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vigouroux (FR 1,271,506) in view of de Kroon et al. (EP 0 115 886).

With regards to claim 54: Vigouroux discloses everything previously mentioned including each construction element has predetermined height, length and width dimensions, but fails to disclose the dimensions being such that, within the wall, the construction elements fit within interior lintels and stretches of masonry beneath ceilings, the construction elements having a weight which is less than or equal to 25 kg, and the height being greater than or equal to the length.

However, de Croon et al. discloses a wall having blocks fitting within lintels (7) and stretches of masonry beneath ceilings (above floor), the construction elements having a weight of about 20 kg, and the height being greater than or equal to the length (pg. 2, lines 13-19; figs. 1-3)

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the construction elements of Vigouroux, to have dimensions being such that, within the wall, the construction elements fit within interior lintels and stretches of masonry beneath ceilings, the construction elements having a weight which is less than 25 kg, and the height being greater than the length as taught by de Croon et al. in order to provide a construction element for creating a desired wall configuration with desired properties (i.e. integrity).

Claims 38, 41, 44-45, 47, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brooke (US 800,067) in view of Vigouroux (FR 1,271,506).

With regards to claims 38 and 41: Brooke discloses a wall constructed from a plurality of construction elements (blocks) made of concrete like material (cement), each

Art Unit: 3633

construction element (block) comprising an upper face, a lower face, and lateral faces, the construction element comprising at least one groove (6) extending over the upper face thereof (figs. 1-2), the groove (6) being associated with a load-bearing wall or partition of the construction element and arranged at a distance from an outer lateral edge of the construction element (figs. 1-2), the construction element further comprising at least one protuberance (5), which extends over the lower face thereof, the protuberance (5) being arranged in such a way that when a first construction element of the plurality is superimposed on a second construction element of the plurality with the wall, the protuberance (5) of the first construction element penetrates into the groove (6) of the second construction element (fig. 1), the construction elements being assembled to one another within the wall by means of a binder (col. 1, lines 9-19), the groove having a volume capable of determining the amount of the binder to be applied therein.

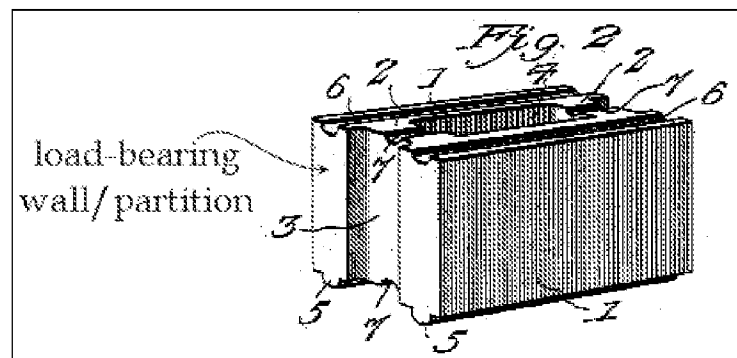


Fig. 2: Brooke (US 800,067)

Brooke discloses everything previously mentioned, but fail to disclose the binder being applied in the groove in such a way that a strip of the binder is formed between the upper face and the lower face of the construction elements, when the first construction element is superimposed on the second construction element the strip

Art Unit: 3633

forming the sole contact between the two superimposed elements, thereby enabling an adjustment of height alignment, height, and plumb of each of the plurality of construction elements.

However, Vigouroux discloses construction elements being assembled to one another within a wall by means of a binder (XX), a groove (AA) having a volume determining an amount binder (XX) to be applied therein, the binder being applied in the groove in such a way that a strip of the binder is formed between the upper face and the lower face of the construction elements, when the first construction element is superimposed on the second construction element, the strip forming the sole contact between the two superimposed elements (fig. 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the wall of Brooke to include a strip of being formed between the upper face and the lower of the construction element, when a construction element is superimposed on another construction element, the strip forming the sole contact between the superimposed elements as taught by Vigouroux in order to provide a wall with sufficient integrity and stability to withstand live and dead loads associated with the environment in which it was constructed (fig. 1).

Examiner submits no new or unpredictable results would be expected from including a binding material as the sole contact between construction elements as such it is well known in the art. For example, a conventional brick wall includes construction elements (bricks) secured to another via a binding material.

The binder strip of Vigouroux is capable of enabling an adjustment of height alignment, height, and plumb of each of the plurality of construction elements.

With regards to claim 44: The depth of the groove and a height of the protuberance of Brooke are approximately equal and proportional to a tolerance which is to be accommodated with each construction element (figs. 1-2).

With regards to claim 45: Brooke further discloses the width of the groove (6) of the construction element is less than a thickness of the load-bearing wall or partition of the construction element (fig. 2).

With regards to claim 47: Brooke further discloses the construction element has a plurality of load-bearing walls or partitions, and wherein the groove (6) is arranged above each of the load-bearing walls or partitions of the plurality (figs. 1-2).

With regards to claim 55: Brooke, previously modified by Vigouroux, further discloses between construction elements extends a thin joint.

Claims 39, 40, 42-43, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brooke (US 800,067) in view of Vigouroux (FR 1,271,506) and in further view of de Kroon et al. (EP 0 115 886).

With regards to claims 39 and 42: As per the modification 38, the protuberance and groove of Brooke would be arranged such way to leave a first space between to allow for clearance of the binder as taught by Vigouroux.

Brooke, in view of Vigouroux, discloses everything previously mentioned, but fails to disclose the protuberance and the groove have a cross-section, which is

Art Unit: 3633

approximately trapezoidal in shape, in such a way that, a protuberance lateral flank of the first construction element extends approximately parallel to a groove lateral flank of the second construction element, and a small base of the trapezoid of the protuberance being arranged opposite a small base of the trapezoid of the groove when they are engaged.

However, de Kroon discloses a wall having construction elements having protuberance (2) and groove (3) having which is approximately trapezoidal in shape, in such a way that, a protuberance lateral flank of the first construction element extends approximately parallel to a groove lateral flank of the second construction element, and a small base of the trapezoid of the protuberance (2) being arranged opposite a small base of the trapezoid of the groove (3) when they are engaged (figs. 1 & 5).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the wall of Brooke, previously modified by Vigouroux, to change the shape of the protuberance and groove to have corresponding trapezoidal cross sections as taught by de Kroon which would yield the predictable results of securing construction elements to one another. To change the shape the protuberance and groove of Brooke to have the known shape of a trapezoid as taught by de Kroon would not be expected to yield new or unpredictable results, the protuberance and groove of Brooke would be expected to perform equally well with either a trapezoidal cross-section or semi-circular cross-section. A change in shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 357 F.2d 669, 149

USPQ 47 (CCPA 1966). Examiner notes that the applicant's disclosure does not provide criticality for the shape of the protuberance and groove being trapezoidal.

As per the modification, the lateral flanks of the trapezoidal protuberance and groove would be arranged in such a fashion as to leave a first space between them, to allow for clearance of the binder, the small bases of the protuberance and groove would be arranged in such a way as to leave a second space between them, filled by binder.

With regards to claims 40 and 43: The ratio of the weight of the construction element to the surface area of the small base of the trapezoidal of protuberance will inherently be inversely proportional to the fluidity of the binder, as the binder supports and allows for the alignment of the construction elements.

With regards to claim 54: Brooke, in view of Vigouroux, discloses everything previously mentioned including each construction element has predetermined height, length and width dimensions, but fails to disclose the dimensions being such that, within the wall, the construction elements fit within interior lintels and stretches of masonry beneath ceilings, the construction elements having a weight which is less than or equal to 25 kg, the height being greater than or equal to the length.

However, de Croon et al. discloses a wall having blocks fitting within lintels (7) and stretches of masonry beneath ceilings (above floor), the construction elements having a weight of about 20 kg, and the height being greater than or equal to the length (pg. 2, lines 13-19; figs. 1-3)

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the construction elements of Brook, in view of Vigouroux,

Art Unit: 3633

to have dimensions being such that, within the wall, the construction elements fit within interior lintels and stretches of masonry beneath ceilings, the construction elements having a weight which is less than 25 kg, the height being greater than the length as taught by de Croon et al. in order to provide a construction element for creating a desired wall configuration with desired properties (i.e. integrity).

Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brooke (US 800,067) in view of Vigouroux (FR 1,271,506) and in further view of Hanner (US 2,821,426).

With regards to claim 53: Vigouroux discloses everything previously mentioned, but fails to disclose in combination, a tool intended for lifting the construction element, wherein the tool is dimensioned so as to allow for the lifting, handling, laying and adjusting the alignment, height, and plumb alignment of the construction element.

However, Hanner discloses a tool (18) for the carrying of blocks for ease of handling (figs. 1-5).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Brooke , previously modified by Vigouroux, to include a tool as taught by Hanner in order to provide means of carrying blocks for ease of handling and transport.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

However, with respect to the reference of Vigouroux, applicant argues that Vigouroux fails to disclose a volume determining an amount of binder to be applied thereon. Applicant further argues the groove is not used for volume dosage.

Examiner submits that Vigouroux discloses a groove volume having an amount of binder applied therein (fig. 1), meeting the claimed limitation. The claims are directed to a wall in which the finished claimed structure comprises a first construction element having a groove with a binder disposed therein where the binder is the sole contact between a first and second construction element, which Examiner submits is disclosed by Vigouroux. Examiner notes applicant's arguments appear to be directed to how the wall is formed when the claims are directed to the article of the wall. If the product in the claim is the same as or obvious from a product of the prior art, the claim is unpatentable. Nonetheless, Examiner submits any binder disposed within the groove is considered a dosage.

Examiner notes applicant's arguments of the Vigouroux groove not providing a volume determining the amount of binder disposed therein appears to contradict applicant's statement on line 10-13 of pg. 12 of the arguments:

"Specifically, on page 2, left column lines 15-17 of Vigouroux, it is mentioned that the height of the ribs A, B, C can be varied and is equal to thickness of the desired horizontal binder strip..."

If the height of the ribs is equal to the height of binder strip, then Vigouroux explicitly discloses providing dosage of binder.

The objection of claims 38 and 53 have been withdrawn in view of the amendment filed 10/15/08.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSIE FONSECA whose telephone number is (571)272-7195. The examiner can normally be reached on M-F 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Canfield can be reached on (571)272-6840. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. F./

Application/Control Number: 10/520,463

Page 16

Art Unit: 3633

Examiner, Art Unit 3633

/Robert J Canfield/

Supervisory Patent Examiner, Art Unit 3635